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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,394	08/18/2003	Yoshinori Tsubaki	03478/HG	3403

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EXAMINER

SCHWARTZ, PAMELA R

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 05/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/643,394

Applicant(s)

TSUBAKI ET AL.

Examiner

Pamela R. Schwartz

Art Unit

1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 7-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-19 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/15/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

1. This action is intended to replace the office action dated 4/13/05 and to correct an omission in that office action.
2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-6, drawn to an ink jet recording sheet, classified in class 428, subclass 32.1.
 - II. Claims 7-19, drawn to a method of producing, classified in class 427, subclass 146.

The inventions are distinct, each from the other because of the following reasons:

Inventions of Group II and of Group I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the article can be made by a materially different method such as casting a layer including fine particle and binder containing hydrophilic polymer compound which has plural side chains on a main chain thereof and a polymerization degree of not less than 300 on a casting surface, irradiating to form crosslinking throughout, adhering the exposed surface to a support and removing the laminate from the casting surface.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

During a telephone conversation with Mr. Chick on April 8, 2005 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-6. Affirmation of this election must be made by applicant in replying to this Office action. Claims 7-19 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Wheeler et al. (EP 672,537). The reference discloses a support and a coatable layer thereon (see the abstract). The coatable layer may contain a polymer compound crosslinked through side chains, wherein the polymer to be crosslinked is hydrophilic with a polymerization degree of 400 to 3000 (see p. 4, lines 25-58). The layer may contain a multivalent metal compound (see p. 4, lines 36-39). Since the photosensitive groups of the reference may include those recited by applicants' specification, the limitation of claim 6 is inherently met by the reference.

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4. Claims 1-4 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Held et al. (5,537,137). The reference discloses an ink jet recording sheet comprising a support at a coating thereon (see col. 7, lines 1-8). The coating may contain a multivalent salt and a polyvinyl alcohol having photocrosslinkable groups (see col. 9, lines 4-38). The polymerization degree of the polyvinyl alcohol is 400 to 3000. The coating may also contain inorganic filler with a filler to polymer ratio of 7 to 1 to 0.5 to 1 (see col. 10, lines 1-16). Since the photosensitive groups of the reference may include those recited by applicants' specification, the limitation of claim 6 is inherently met by the reference.

5. Claims 1 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Held et al. (5,537,137) for reasons given above with respect to claim 1 and in further view of Tsuchiya et al. (JP411034481) or Mukouyoshi et al. (JP411034486) for reasons set forth below. Held et al. does not disclose the particle size of the inorganic filler that may be included therein. However, it is well known to include inorganic fillers in ink jet recording media and the size range disclosed by applicants as conventional in the art. The secondary art is cited to support the statements concerning the state of the art. The secondary references each teach an ink jet recording layer including particles within the size range of claim 5. Based upon the state of the art and the secondary references, it would have been obvious to one of ordinary skill in the art to include particles of a size conventionally used in the art as the particles of the primary reference, since this is a size regularly used in such layers and because the primary reference does not disclose a size range for its inorganic filler particles.

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6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-6 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of copending Application Nos. 10/770,619, 10/833,842, 10/855,525, 10/886,433, 10/823,340, and 10/868,481. Although the conflicting claims are not identical, they are not patentably distinct from each other because each of these copending applications recites in its claims an ink jet recording sheet having a layer comprising a hydrophilic binder and an inorganic pigment. The binder is recited as cross-linked with ionizing radiation. Relying on the specifications to flesh out the embodiments recited by the claims of the copending applications, the claims of the applications are directed to the same kinds of binders with the same or overlapping polymerization degree that have photosensitive groups capable of dimerization as set forth by applicants' claim 6. Determination of the ratio of components within conventional ranges would have been obvious to one of ordinary skill in the art. With respect to the inclusion of a multivalent metal compound, inclusion of these materials is well known in the art for its mordanting properties.

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This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pamela Schwartz whose telephone number is (571) 272-1528.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye, can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PRSchwartz
April 14, 2005



PAMELA F. SCHWARTZ
PRIMARY EXAMINER